

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS  
RN 15674-58-5 REGISTRY  
CN 1-Benzopyrylium, 3-[[6-O-(6-deoxy-.alpha.-L-mannopyranosyl)-.beta.-D-glucopyranosyl]oxy]-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-, chloride (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Flavylium, 3-[[6-O-(6-deoxy-.alpha.-L-mannopyranosyl)-.beta.-D-glucopyranosyl]oxy]-3',4',5,5',7-pentahydroxy-, chloride (8CI)  
CN Tulipanin (6CI, 7CI)  
OTHER NAMES:  
CN 3',4',5,5',7-Pentahydroxy-3-[(6-O-.alpha.-L-rhamnosyl-.beta.-D-glucosyl)oxy]flavylium chloride  
CN 3-O-Rutinosyldelphinidin  
CN Delphinidin 3-O-rutinoside  
CN Delphinidin 3-rutinoside  
FS STEREOSEARCH  
MF C27 H31 O16 . Cl  
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, MEDLINE, MSDS-OHS, NAPRALERT, TOXCENTER  
(\*File contains

L13 ANSWER 1 OF 21 USPATFULL

ACCESSION NUMBER: 2003:85867 USPATFULL  
TITLE: Oral delivery formulation  
INVENTOR(S): Compton, Bruce Jon, Lexington, MA, UNITED STATES  
Solaris, Nancy E., West Newton, MA, UNITED STATES  
Flangan, Margaret A., Stow, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003059471	A1	20030327
APPLICATION INFO.:	US 2001-997277	A1	20011129 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1998-55560, filed on 6 Apr 1998, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-69501P	19971215 (60)
	US 1998-73867P	19980204 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Stephen J Gaudet, 68H Stiles Road, Salem, NH, 03079	
NUMBER OF CLAIMS:	42	
EXEMPLARY CLAIM:	1	
LINE COUNT:	2950	
SUMM	. . . elderly hinder their ability to swallow traditional dosage forms and to self-administer medication (e.g., arthritis, tremors associated with neurological disorders, <b>visual</b> impairment, and memory problems). Physical limitations present in this age group include difficulty in swallowing due to dehydration, "mouth breathing",. . .	
SUMM	. . . as apple, prune, apricot, pear, pineapple, banana, grape, strawberry, raspberry, blackberry, boysenberry, loganberry, dewberry, gooseberry, cranberry, mulberry, elderberry, blueberry, fig, <b>currant</b> , kiwi may be used.	
SUMM	. . . raltitrexed; ramosetron; ras farnesyl protein transferase inhibitors; ras inhibitors; ras-GAP inhibitor; retelliptine demethylated; rhenium Re 186 etidronate; rhizoxin; ribozymes; RII <b>retinamide</b> ; rogletimide; rohitukine; romurtide; roquinimex; rubiginone B1; ruboxyl; safingol; saintopin; SarCNU; sarcophytol A; sargramostim; Sdi 1 mimetics; semustine; senescence derived inhibitor.	
SUMM	. . . danaparoid; daphlnodorin A; dapiprazole; dapitant; darifenacin; darlucin A; darsidomine; ddUTP; decitabine; deferiprone; deflazacort; dehydrodidemnin B; dehydroepiandrosterone; delapril; delequamine; delfaprazine; delmopinol; <b>delphinidin</b> ; deoxyypyridinoline; deprodone; despidomycin; deramciclanc; dermatan sulfate; desflurane; desirudin; deslorelin; desmopressin; desogestrel; desoxoamiodarone; detajmium bitartrate; dexifosfamide; dexketoprofen; dexloxiglumide; dexmedetomidine; dexpemedolac; dextrazoxane;. . .	
SUMM	. . . antioxidants useful in the present invention may be selected from the group consisting of all forms of Vitamin A including <b>retinal</b> and 3,4-didehydroretinal, all forms of carotene such as Alpha-carotene, beta-carotene (beta, beta-carotene), gamma-carotene, delta-carotene, all forms of Vitamin C (D-ascorbic. . .	

L13 ANSWER 2 OF 21 USPATFULL

ACCESSION NUMBER: 2002:295221 USPATFULL  
TITLE: Use of a pharmaceutical composition for treating and/or preventing ischemia  
INVENTOR(S): Remacle, Jose, Malonne, BELGIUM  
Michiels, Carine, Spy, BELGIUM

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002165270	A1	20021107

APPLICATION INFO.: US 2002-131921 A1 20020423 (10)  
RELATED APPLN. INFO.: Continuation of Ser. No. US 2000-423967, filed on 20  
Mar 2000, ABANDONED A 371 of International Ser. No. WO  
1998-BE67, filed on 12 May 1998, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	BE 1997-415	19970513
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	KNOBBE MARTENS OLSON & BEAR LLP, 620 NEWPORT CENTER DRIVE, SIXTEENTH FLOOR, NEWPORT BEACH, CA, 92660	
NUMBER OF CLAIMS:	4	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	4 Drawing Page(s)	
LINE COUNT:	653	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . of mixtures of large numbers of complex macromolecules, and the presence of some of these macromolecules of structures of the **flavonoid** type which are known for their antioxidant properties has overshadowed the possibility of these extracts or molecules having an anti-ischemic. . .

SUMM . . . hesperidin methyl chalcone, horse-chestnut extract, naftazone, esculoside, aescin, procyanidine oligomers, ruscus and hesperidin methyl chalcone extracts, ruscoides, common holly and **blackcurrant** extracts and blueberry **anthocyanin** extracts and the active principles which are isolated from these compounds, and/or a mixture thereof, for preparing a medicament which. . .

SUMM . . . Endothelon	Sanofi	
oligomers		
Ruscus and	Cyclo 3	Fabre
hesperidin methyl chalcone extracts		
Ruscoides	Cirkan	Sinbio-Fabre
Common holly and	Veinobiase	Laboratoire
<b>blackcurrant</b>		Fournier
extracts		Schwartz-Pharma
Blueberry	Difrarel	Labo Leurquin
<b>anthocyanin</b>		Mediolanum
extracts		

SUMM [0019] The preferred active compounds of the invention are hesperidin methyl chalcone, aescin, procyanidine oligomers and blueberry **anthocyanin** extracts, which active compounds are characterized by properties which are particularly advantageous and unexpected in the treatment of ischemia and. . .

SUMM . . . to vasospasms, leading to vasoconstriction of the arteries, ulcers, change in capillary permeability, capillary fragility, wound-healing, changes to the skin, **retinal** defects of ischemic origin, loss of auditory acuity of ischemic origin, disorders associated with time spent at high altitude, angina. . .

L13 ANSWER 3 OF 21 USPATFULL

ACCESSION NUMBER: 2002:287515 USPATFULL  
TITLE: Stress-regulated genes of plants, transgenic plants containing same, and methods of use  
INVENTOR(S): Harper, Jeffrey F., Del Mar, CA, UNITED STATES  
Kreps, Joel, Carlsbad, CA, UNITED STATES  
Wang, Xun, San Diego, CA, UNITED STATES  
Zhu, Tong, San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002160378	A1	20021031
APPLICATION INFO.:	US 2001-938842	A1	20010824 (9)

	NUMBER	DATE
	-----	-----
PRIORITY INFORMATION:	US 2000-227866P	20000824 (60)
	US 2001-264647P	20010126 (60)
	US 2001-300111P	20010622 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Lisa A. Haile, J.D., Ph.D., GRAY CARY WARE & FREIDENRICH LLP, Suite 1600, 4365 Executive Drive, San Diego, CA, 92121-2189	
NUMBER OF CLAIMS:	79	
EXEMPLARY CLAIM:	1	
LINE COUNT:	10399	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		
SUMM	. . . Phaseolus, e.g., common bean and lima bean, Pisum, e.g., field bean, Melilotus, e.g., clover, Medicago, e.g., alfalfa, Lotus, e.g., trefoil, <b>lens</b> , e.g., lentil, and false indigo. Preferred forage and turf grass for use in the methods of the invention include alfalfa, . . .	
SUMM	. . . a comparison window or designated region as measured using any number of sequence comparison algorithms or by manual alignment and <b>visual</b> inspection.	
SUMM	. . . TFASTA in the Wisconsin Genetics Software Package, Genetics Computer Group, 575 Science Dr., Madison, Wis.); or by manual alignment and <b>visual</b> inspection. Other algorithms for determining homology or identity include, for example, in addition to a BLAST program (Basic Local Alignment. . .	
SUMM	. . . include the ABA- and turgor-inducible promoters, the promoter of the auxin-binding protein gene (Schwob et al., 1993), the UDP glucose <b>flavonoid</b> glycosyl-transferase gene promoter (Ralston et al., 1988), the MPI proteinase inhibitor promoter (Cordero et al., 1994), and the glyceraldehyde-3-phosphate dehydrogenase. . .	
SUMM	. . . a chalcone synthase promoter, a zein promoter, a globulin-1 promoter, an ABA promoter, an auxin-binding protein promoter, a UDP glucose <b>flavonoid</b> glycosyl-transferase gene promoter, an NTI promoter, an actin promoter, an opaque 2 promoter, a b70 promoter, an oleosin promoter, a. . .	
SUMM	. . . be used to introduce an exogenous polynucleotide sequence, for example, a plant stress-regulated regulatory element into apple, aspen, belladonna, black <b>currant</b> , carrot, celery, cotton, cucumber, grape, horseradish, lettuce, morning glory, muskmelon, neem, poplar, strawberry, sugar beet, sunflower, walnut, asparagus, rice and. . .	
SUMM	. . . Phaseolus, e.g., common bean and lima bean, Pisum, e.g., field bean, Melilotus, e.g., clover, Medicago, e.g., alfalfa, Lotus, e.g., trefoil, <b>lens</b> , e.g., lentil, and false indigo. Preferred forage and turf grass for use in the methods of the invention include alfalfa, . . .	
DETD	. . . protein	
2665	SGP1 monomeric G-protein (emb CAB54517.1)	
2666	putative serine carboxypeptidase II	
2667	putative L5 ribosomal protein	
2668	putative glucosyltransferase	
2669	<b>flavonoid</b> 3,5-hydroxylase like protein	
2670	putative protein	
2671	putative protein	
2672	putative Fe(II)/ascorbate oxidase	
2673	putative <b>anthocyanin</b> 5- aromatic acyltransferase	

2674 casein kinase I  
 2675 putative 2,3-  
 bisphosphoglycerate-  
 independent  
 phosphoglycerate mutase  
 2676 putative glutathione S-  
 transferase TSI-1

L13 ANSWER 4 OF 21 USPATFULL

ACCESSION NUMBER: 2002:279745 USPATFULL  
 TITLE: Process for extracting compounds from plants  
 INVENTOR(S): Krasutsky, Pavel A., Duluth, MN, UNITED STATES  
 Nesterenko, Vitaliy V., Duluth, MN, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002155177	A1	20021024
APPLICATION INFO.:	US 2002-53237	A1	20020117 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2001-969130, filed on 1 Oct 2001, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-236579P	20000929 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A., P.O. BOX 2938, MINNEAPOLIS, MN, 55402	
NUMBER OF CLAIMS:	38	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Page(s)	
LINE COUNT:	1603	

SUMM . . . . one or more acidic compounds comprises betulin acid, betulin-3-caffeate, tannin, lipid, phenol, caffeic acid, cichoric acid, valerenic acid, isovaleric acid, **flavonoid**, quercetin, kaempferol, catechin, lignin, shikimic acid, succinic acid, amino acid, nicotinic acid, pantothenic acid, anthraquinone, acidic galactan, benzoic acid, quinic. . . .

DETD . . . . to any small fruit that is pulpy or succulent throughout, having seeds loosely imbedded in the pulp, such as the **currant**, grape, or blueberry. Berry can be further defined as an indehiscent fruit derived from a single ovary and having the. . . .

DETD . . . . a ripened ovule, consisting of an embryo with one or more integuments, or coverings, such as an apple seed, a **currant** seed, dill seed, or kola nut seed. By germination, most seeds produces a new plant. "Seed" also refers to any. . . .

DETD [0033] "Echinacea spp." refers to a perennial native to North American which resembles a black-eyed Susan and is called echinacea, purple coneflower or snake root;

DETD . . . . molecule with hydroxyl (OH) groups attached) and terpene lactones, including ginkgolides A, B, and C, bilobalide (a sesquiterpene), quercetin (a **flavonoid**), and kaempferol (a **flavonoid**). The constituents of ginkgo include terpenoids (bilobalide), diterpenoids (ginkgolide A, ginkgolide B, ginkgolide C, ginkgolide J, ginkgolide M), flavonoids: flavones. . . .

DETD [0075] As used herein, "**flavonoid**" refers to polyphenols that have a carbon skeleton. They have an acidic nature due to the phenol groups.

CLM What is claimed is:

. . . . the one or more acidic compounds comprises betulin acid, betulin-3-caffeate, tannin, phenol, caffeic acid, cichoric acid, valerenic acid, isovaleric acid, **flavonoid**, quercetin, kaempferol, catechin, lignin, shikimic acid, succinic acid, amino acid,

nicotinic acid, pantothenic acid, anthraquinone, acidic galactan, benzoic acid, quinic. . . .  
 . . . the one or more acidic compounds comprises betulin acid, betulin-3-caffeate, tannin, phenol, caffeic acid, cichoric acid, valerenic acid, isovaleric acid, **flavonoid**, quercetin, kaempferol, catechin, lignin, shikimic acid, succinic acid, an amino acid, nicotinic acid, pantothenic acid, anthraquinone, acidic galactan, benzoic acid, . . .

L13 ANSWER 5 OF 21 USPATFULL

ACCESSION NUMBER: 2002:213480 USPATFULL  
 TITLE: Process for extracting compounds from plants  
 INVENTOR(S): Krasutsky, Pavel A., Duluth, MN, UNITED STATES  
 Nesterenko, Vitaliy V., Rantoul, IL, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002114853	A1	20020822 .
APPLICATION INFO.:	US 2001-969130	A1	20011001 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-236579P	20000929 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A., P.O. BOX 2938, MINNEAPOLIS, MN, 55402	
NUMBER OF CLAIMS:	28	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Page(s)	
LINE COUNT:	1455	

SUMM . . . one or more acidic compounds comprises betulin acid, betulin-3-caffeate, tannin, lipid, phenol, caffeic acid, cichoric acid, valerenic acid, isovaleric acid, **flavonoid**, quercetin, kaempferol, catechin, lignin, shikimic acid, succinic acid, amino acid, nicotinic acid, pantothenic acid, antraquinone, acidic galactan, benzoic acid, quinic. . . .

DETD . . . to any small fruit that is pulpy or succulent throughout, having seeds loosely imbedded in the pulp, such as the **currant**, grape, or blueberry. Berry can be further defined as an indehiscent fruit derived from a single ovary and having the. . . .

DETD . . . a ripened ovule, consisting of an embryo with one or more integuments, or coverings, such as an apple seed, a **currant** seed, dill seed, or kola nut seed. By germination, most seeds produces a new plant. "Seed" also refers to any. . . .

DETD [0033] "Echinacea spp." refers to a perennial native to North American which resembles a black-eyed Susan and is called echinacea, purple coneflower or snake root;

DETD . . . molecule with hydroxyl (OH) groups attached) and terpene lactones, including ginkgolides A, B, and C, bilobalide (a sesquiterpene), quercetin (a **flavonoid**), and kaempferol (a **flavonoid**). The constituents of ginkgo include terpenoids (bilobalide), diterpenoids (ginkgolide A, ginkgolide B, ginkgolide C, ginkgolide J, ginkgolide M), flavonoids: flavones. . . .

DETD [0075] As used herein, "**flavonoid**" refers to polyphenols that have a carbon skeleton. They have an acidic nature due to the phenol groups.

CLM What is claimed is:

. . . the one or more acidic compounds comprises betulin acid, betulin-3-caffeate, tannin, phenol, caffeic acid, cichoric acid, valerenic acid, isovaleric acid, **flavonoid**, quercetin, kaempferol, catechin, lignin, shikimic acid, succinic acid, amino acid, nicotinic acid, pantothenic acid, antraquinone, acidic galactan, benzoic acid, quinic. . . .

. . . the one or more acidic compounds comprises betulin acid, betulin-3-caffeate, tannin, phenol, caffeic acid, cichoric acid, valerenic acid, isovaleric acid, **flavonoid**, quercetin, kaempferol, catechin, lignin, shikimic acid, succinic acid, an amino acid, nicotinic acid, pantothenic acid, antraquinone, acidic galactan, benzoic acid, . . .

L13 ANSWER 6 OF 21 USPATFULL

ACCESSION NUMBER: 2002:186178 USPATFULL  
 TITLE: Use of **flavonoid** aldehydes as pesticides  
 INVENTOR(S): Emerson, Ralph W., Davis, CA, UNITED STATES  
 Crandall, Bradford G., JR., Davis, CA, UNITED STATES  
 PATENT ASSIGNEE(S): ProGuard, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002099101	A1	20020725
APPLICATION INFO.:	US 2001-866552	A1	20010525 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1997-860514, filed on 21 Jul 1997, ABANDONED A 371 of International Ser. No. WO 1995-US17053, filed on 29 Dec 1995, UNKNOWN Continuation-in-part of Ser. No. US 1995-479623, filed on 7 Jun 1995, PATENTED Continuation-in-part of Ser. No. US 1994-366973, filed on 30 Dec 1994, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	David J. Brezner, Esq., FLEHR HOHBACH TEST ALBRITTON & HERBERT LLP, Suite 3400, Four Embarcadero Center, San Francisco, CA, 94111-4187		
NUMBER OF CLAIMS:	25		
EXEMPLARY CLAIM:	1		
LINE COUNT:	2989		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			
TI	Use of <b>flavonoid</b> aldehydes as pesticides		
AB	Methods and compositions based upon natural <b>flavonoid</b> aldehydes, including cinnamic aldehyde, .alpha.-hexyl cinnamic aldehyde, and coniferyl aldehyde are provided, which find use as pesticides. The compositions are. . .		
SUMM	. . . organisms such as fungi and sapsucking insects are provided together with a method to biocontrol pathogen infestations on plants using <b>flavonoid</b> aldehydes. By "biocontrol" is intended control of plant pathogens via direct antipathogenic activity and/or induced resistance of the host plant. . .		
SUMM	[0019] The compositions and methods of the subject invention offer several advantages over existing compositions and methods. Although a <b>flavonoid</b> aldehyde, cinnamic aldehyde, has been reported to exhibit antifungal properties, it has not previously been used on plants as an. . .		
SUMM	. . . relatively remote and inaccessible regions of the plant, such as the roots and meristems. This remote effect occurs because the <b>flavonoid</b> aldehydes are transported in the plant vascular system, which allows for long distance transport of the compounds within living plants,. . .		
SUMM	. . . and R.sub.4 represents a hydrogen or an organic substituent containing from 1 to 10 carbon atoms. Of particular interest are <b>flavonoid</b> aldehydes, particularly aromatic aldehydes. Examples of aromatic aldehydes of use in the present invention are cinnamic aldehyde ((3) below): ##STR3##		
SUMM	. . . No. 4,978,686. Generally, detergents and other agents used in the formulation do not detract from the pesticide properties of the <b>flavonoid</b> aldehydes but do increase the substantive properties of the formulation (see for example, U.S. patent application Ser. No. 4,477,361) and. . .		
SUMM	. . . sources. Saponins can be used as an adjuvant and surfactant and		

for reducing phytotoxicity and/or increasing the efficacy of the **flavonoid** aldehyde used. Saponins are a class of compounds, each consisting of a sapogenin portion and a sugar moiety. The sapogenin.

- SUMM . . . tissues or harvested materials would be equivalent to the practice of the present invention. Biological conversion of precursor compounds into **flavonoid** aldehydes is described in, for example, U.S. patent application Ser. No. 5,149,715 and references cited therein. See also Casey and.
- SUMM . . . a plant host is measured using methods known in the art. A desired phenotype, for example, is increased saponin and/or **flavonoid** aldehyde content in a plant tissue of interest as measured by expression of the gene of interest and/or the level.
- SUMM . . . antipathogenic effect when either directly or indirectly introduced to the target organism. Transgenic plants having an increased ability to accumulate **flavonoid** aldehydes such as cinnamaldehyde, a-hexyl cinnamic aldehyde and coniferyl aldehyde, in addition to autoprotection against plant pathogens can be used as a source of **flavonoid** aldehydes for extraction and subsequent use as a chemical pesticide.
- SUMM [0059] Accumulation of **flavonoid** aldehydes can be achieved by downregulating the expression of specific plant genes that encode enzymes which either cause further metabolism.
- SUMM . . . a small fraction of the transformants produced will have a sufficiently low residual enzyme activity to cause the accumulation of **flavonoid** aldehydes without also producing some undesirable side effects on plant development. For this reason, a preferred method of producing the.
- SUMM [0064] An alternative to overproducing **flavonoid** aldehydes in transgenic plants is to use the plant genes to confer on a microbial host the capability of synthesizing specific **flavonoid** aldehydes and/or saponins. The resulting microbes may be used either to produce the **flavonoid** aldehydes in a fermentation system or as a natural delivery system of the **flavonoid** aldehydes in viable or non-viable microbial preparations. Yeasts, especially *Saccharomyces cerevisiae*, are preferred organisms for this purpose because they have.
- SUMM . . . in Enzymol. 194:182-187). Standard enzyme assays are used to confirm the functional expression of the engineered genes and assays for **flavonoid** aldehydes are used to select strains with maximal production. Because **flavonoid** aldehydes have antimicrobial properties it is preferred to use expression vectors that will cause expression of the introduced genes only.
- SUMM . . . *Podosphaera leucotricha*: apple, pear and quince; *P. oxycanthae*: apricot, cherry, peach and plum; *Spaelotheca macularis*: strawberries; *S. mors-uvae*: gooseberry and **currant**; *S. pannosa*: peach and rose; and *Uncinula necator*: grape, horse chestnut and linden.
- SUMM . . . or pin-oak rust (*C. quercuum* f. sp. *virginianae*); pine-sweet fern blister rust (*C. comptoniae*); pine-Comandra rust (*C. comandrae*); and southern cone rust (*C. strobilinum*). Others include *Melampsora*, which causes rust of flax (*M. lini*); *Coleosporium*, which causes blister rust of pine.
- SUMM . . . grape from infestation by leaf roller, phylloxera, leaf hopper, botrytis, thrips, and powdery mildew. Preferred formulations are from the aromatic **flavonoid** aldehydes of formulae (2) and (5), with formulae (3), (4) and (5) preferred.
- SUMM [0087] The subject **flavonoid** aldehyde compositions also are useful for control of San Jose scale, which is an oddly shaped and immobile insect. Like.
- DETD . . . seen and the excised roots maintained resistance to phylloxera reinfestation for at least 5 weeks after treatment, suggesting that the **flavonoid** aldehyde and/or a metabolite is translocated to the roots where it directly causes phylloxera to die or vacate feeding



sites. Alternatively, **flavonoid** aldehyde induces the plant to change its root chemistry in a way that makes the roots unacceptable to phylloxera feeding. . . . upwardly mobile in plants, not downwardly mobile; therefore this downward mobility is an important addition to the insecticidal arsenal. If **flavonoid** aldehydes are stimulants of induced host plant resistance, it adds a new approach to treatment of plant pests.

DETD . . . tapwater at room temperature (19.degree. C.) is pipetted into each cell. Ten nematodes are placed in each cell using an **eyelash** glued to a dissecting needle to handle each animal. One-half ml of one test solution is then added to each. . . .

DETD . . . at 21.degree. C. with a 12-hour photo period from cool-white fluorescent lamps (PAR=32.mu. E.M.sup.-2.S.sup.-1) (vase life evaluation). Fresh weights and **visual** observation are recorded daily. Roses are discarded during the 10 day period if B. Cinerea macerates the entire receptacle causing. . . .

DETD [0191] Susceptibility of Different Codling Moth Life Stages to **Flavonoid** Aldehydes

DETD [0195] Strips of adhesive plastic foil (5.times.10 cm) are treated in a Potter spray tower with different concentrations of **flavonoid** aldehyde formulae. After residue has dried the treated plastic strips are exposed to 10-15 moth pairs inside a cage for. . . .

DETD . . . Eggs laid on plastic strips or fruit (apple) are treated in the Potter spray tower with different concentrations of the **flavonoid** aldehyde formulae. Egg mortality is evaluated as above. Tests are conducted with young eggs (white stage) and eggs close to. . . .

DETD . . . Agric. Ecosyst. Environ. 16: 189-202) is used. Apples are treated in the Potter spray tower with different concentrations of the **flavonoid** aldehyde formulae. Small gelatine capsules are attached with beeswax to the treated fruit surface. A single neonate larva is then. . . .

DETD [0203] To determine the contact activity of the **flavonoid** aldehyde formulae, test scales are sprayed directly. The treated insects are removed and placed in sterile untreated petri dishes or. . . .

DETD [0204] To determine the contact activity of the **flavonoid** aldehyde formulae, test mealybugs are sprayed directly. The treated insects are removed and placed in sterile untreated petri dishes or. . . .

DETD . . . a plastic paper plate to insure high humidity for increased disease development. Disease assessment was made 2-days after inoculation by **visual** evaluation of the fungal mycelium growth from the infected rye-grain (0-4 max). A **visual** rating of the overall field plot appearance was also taken weekly, beginning three and a half weeks after the initial. . . .

DETD [0237] Disease assessment was made 2-days after inoculation by **visual** evaluation of the fungal mycelium growth from the infected rye-grain (0.4 max); 0=no disease, 1 mycelium growth initiated 2=0.5 cm. . . .

DETD Overproduction of **Flavonoid** Aldehydes in Transgenic Plants

DETD . . . progeny inheriting both gene constructs are selected by PCR. Plants with suppressed CA4H and suppressed CAD activity are analyzed for **flavonoid** aldehyde production using standard published procedures.

DETD Production of **Flavonoid** Aldehydes in Microbial Systems

DETD . . . significantly greater than the background activity detected in control strains are selected for further analysis. Selected strains are analyzed for **flavonoid** aldehyde production using standard published procedures and those producing significant amounts of cinnamaldehyde are selected for optimization of fermentation conditions.

DETD [0252] These Examples demonstrate that the subject **flavonoid** aldehyde formulations and methods are useful for treatment and/or prevention of infestation of plants by a wide variety of pest. . . .

L13 ANSWER 7 OF 21 USPATFULL

ACCESSION NUMBER: 2001:134527 USPATFULL  
TITLE: Use of ovary-tissue transcriptional factors  
INVENTOR(S): McBride, Kevin, Davis, CA, United States  
Stalker, David, Davis, CA, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001014977	A1	20010816
APPLICATION INFO.:	US 2001-777347	A1	20010205 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1995-487087, filed on 7 Jun 1995, PENDING Continuation-in-part of Ser. No. US 1992-998158, filed on 29 Dec 1992, GRANTED, Pat. No. US 5530185 Continuation-in-part of Ser. No. US 1990-554195, filed on 17 Jul 1990, GRANTED, Pat. No. US 5175095 Continuation-in-part of Ser. No. US 1989-382518, filed on 19 Jul 1989, ABANDONED		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	Rae-Venter Law Group, P.C., P.O. Box 60039, Palo Alto, CA, 94306		
NUMBER OF CLAIMS:	23		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	11 Drawing Page(s)		
LINE COUNT:	1697		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			
DETD	. . . result in useful modifications to the edible portions of many fruits, including true berries such as tomato, grape, blueberry, cranberry, <b>currant</b> , and eggplant; stone fruits (drupes), such as cherry, plum, apricot, peach, nectarine and avocado; and compound fruits (druplets), such as. . .		
DETD	. . . colored pigments in plant tissues, such as the Maize A1 gene which encodes a dihydroflavonol reductase, an enzyme of the <b>anthocyanin</b> pigmentation pathway. In cells that express the A1 gene, dihydrokempferol is converted to 2-8 alkylleucopelargonidin, which may be further metabolized to pelargonidin pigment by endogenous plant enzymes. Other <b>anthocyanin</b> or <b>flavonoid</b> type pigments may also be of interest for modification of cotton cell fibers, plant flowers or other plant tissues. For. . .		
DETD	. . . green colored fibers has been identified. The existence of these colored cotton lines suggests that the precursors required for the <b>anthocyanin</b> pigment pathways are present in cotton fibers cells, thus allowing further color phenotype modifications.		
DETD	. . . any of a variety of ways, depending upon the nature of the product, and include immune assay, enzyme assay or <b>visual</b> inspection, for example to detect pigment formation in the appropriate plant part or cells. Once transgenic plants have been obtained,. . .		

L13 ANSWER 8 OF 21 USPATFULL

ACCESSION NUMBER: 2001:121653 USPATFULL  
TITLE: Ovary-tissue transcriptional factors  
INVENTOR(S): McBride, Kevin, Davis, CA, United States  
Stalker, David, Davis, CA, United States  
PATENT ASSIGNEE(S): Calgene LLC, Davis, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6268546	B1	20010731
APPLICATION INFO.:	US 1995-487087		19950607 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1992-998158, filed on 29 Dec 1992, now patented, Pat. No. US 5530185 Continuation-in-part of Ser. No. US 1990-554195, filed on 17 Jul 1990, now patented, Pat. No. US 5175095		

Continuation-in-part of Ser. No. US 1989-382518, filed  
on 19 Jul 1989, now abandoned

DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Hauda, Karen M.  
ASSISTANT EXAMINER: Woitach, Joseph  
LEGAL REPRESENTATIVE: Rae-Venter, Barbara, Wahlsten, Jennifer  
Rae-Venter Law Group  
PC

NUMBER OF CLAIMS: 22  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 13 Drawing Figure(s); 11 Drawing Page(s)  
LINE COUNT: 1657

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . result in useful modifications to the edible portions of many  
fruits, including true berries such as tomato, grape, blueberry,  
cranberry, **currant**, and eggplant; stone fruits (drupes), such  
as cherry, plum, apricot, peach, nectarine and avocado; and compound  
fruits (druplets), such as. . .

DETD . . . colored pigments in plant tissues, such as the Maize A1 gene  
which encodes a dihydroflavonol reductase, an enzyme of the  
**anthocyanin** pigmentation pathway. In cells that express the A1  
gene, dihydrokempferol is converted to 2-8 alkylleucopelargonidin, which  
may be further metabolized to pelargonidin pigment by endogenous plant  
enzymes. Other **anthocyanin** or **flavonoid** type  
pigments may also be of interest for modification of cotton cell fibers,  
plant flowers or other plant tissues. For. . .

DETD . . . green colored fibers has been identified. The existence of  
these colored cotton lines suggests that the precursors required for the  
**anthocyanin** pigment pathways are present in cotton fibers cells,  
thus allowing further color phenotype modifications.

DETD . . . any of a variety of ways, depending upon the nature of the  
product, and include immune assay, enzyme assay or **visual**  
inspection, for example to detect pigment formation in the appropriate  
plant part or cells. Once transgenic plants have been obtained,. . .

L13 ANSWER 9 OF 21 USPATFULL

ACCESSION NUMBER: 2001:97972 USPATFULL  
TITLE: Use of **flavonoid** and aromatic aldehydes as  
pesticides  
INVENTOR(S): Emerson, Ralph W., Davis, CA, United States  
Crandall, Jr., Bradford G., Davis, CA, United States  
PATENT ASSIGNEE(S): Proguard, Inc, Suisun, CA, United States (U.S.  
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6251951	B1	20010626
APPLICATION INFO.:	US 1995-479623		19950607 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1994-366973, filed on 30 Dec 1994 Continuation-in-part of Ser. No. US 1994-367082, filed on 30 Dec 1994		

DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Levy, Neil S.  
LEGAL REPRESENTATIVE: Venter, Barbara Rae  
Rae-VenterLaw Group, PC  
NUMBER OF CLAIMS: 16  
EXEMPLARY CLAIM: 1  
LINE COUNT: 1690

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

TI Use of **flavonoid** and aromatic aldehydes as pesticides  
AB Methods and compositions based upon natural **flavonoid** and  
aromatic aldehydes are provided, which find use as pesticides. The  
compositions are effective against pathogenic fungi and insects at. . .

SUMM The use of **flavonoid** and aromatic aldehydes for treatment of both fungal and other pathogens has been reported. However the preparations used have been. . . .

SUMM . . . . organisms such as fungi and sapsucking insects are provided together with a method to biocontrol pathogen infestations on plants using **flavonoid** and aromatic aldehydes. By "biocontrol" is intended control of plant pathogens via direct antipathogenic activity and/or induced resistance of the. . . .

SUMM The compositions and methods of the subject invention offer several advantages over existing compositions and methods. Although a **flavonoid** aldehyde, cinnamic aldehyde, has been reported to exhibit antifungal properties, it has not previously been used on plants in the. . . .

SUMM . . . . a microbial host the capability of synthesizing specific aromatic aldehydes. The resulting microbes may be used either to produce the **flavonoid** aldehydes in a fermentation system or as a natural delivery system of the aromatic aldehydes in viable or non-viable microbial. . . .

SUMM . . . . Podosphaera leucotricha, apple, pear and quince; P. oxyacanthae, apricot, cherry, peach and plum; Spaelotheca macularis, strawberries; S. mors-uvae, gooseberry and **currant**; S. pannosa, peach and rose; and Uncinula necator, grape, horse chestnut and linden.

SUMM . . . . or pined rust (C. quercuum f. sp. virginianae); pine-sweet fern blister rust (C. comptoniae); pine-Comandra rust (C. comandrae); and southern **cone** rust (C. strobilinum). Melampsora, causes rust of flax (M. lini). Coleosporium, causes blister rust of pine needles (C. asterinum). Gymnoconia,. . . .

DETD . . . . tapwater at room temperature (19.degree. C.) is pipetted into each cell. Ten nematodes are placed in each cell using an **eyelash** glued to a dissecting needle to handle each animal. One-half ml of one test solution is then added to each. . . .

DETD . . . . progeny inheriting both gene construct are selected by PCR. Plants with suppressed CA4H and suppressed CAD activity are analyzed for **flavonoid** aldehyde production using standard published procedures.

L13 ANSWER 10 OF 21 USPATFULL

ACCESSION NUMBER: 2001:60115 USPATFULL

TITLE: Use of ovary-tissue transcriptional factors for altering plant color

INVENTOR(S): McBride, Kevin E., Davis, CA, United States  
Stalker, David M., Woodland, CA, United States

PATENT ASSIGNEE(S): Calgene, LLC, Davis, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6222097	B1	20010424
	WO 9109128		19910919
APPLICATION INFO.:	US 1997-984320		19971203 (8)
	WO 1996-US9911		19960607
			19921229 PCT 371 date
			19921229 PCT 102(e) date
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. WO 1996-US9911, filed on 7 Jun 1996 Continuation-in-part of Ser. No. US 1995-487087, filed on 7 Jun 1995 Continuation-in-part of Ser. No. US 1992-998158, filed on 29 Dec 1992, now patented, Pat. No. US 5530185 Continuation-in-part of Ser. No. US 1990-554195, filed on 17 Jul 1990, now patented, Pat. No. US 5175095 Continuation-in-part of Ser. No. US 1989-382518, filed on 19 Jul 1989, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		

PRIMARY EXAMINER: Hauda, Karen M.  
ASSISTANT EXAMINER: Woitach, Joseph T.  
LEGAL REPRESENTATIVE: Wahlsten, Jennifer, Rae-Venter, BarbaraRae-Venter Law Group, P.C.

NUMBER OF CLAIMS: 9  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 13 Drawing Figure(s); 11 Drawing Page(s)  
LINE COUNT: 1582

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . result in useful modifications to the edible portions of many fruits, including true berries such as tomato, grape, blueberry, cranberry, **currant**, and eggplant; stone fruits (drupes), such as cherry, plum, apricot, peach, nectarine and avocado; and compound fruits (druplets), such as. . .

DETD . . . colored pigments in plant tissues, such as the Maize A1 gene which encodes a dihydroflavonol reductase, an enzyme of the **anthocyanin** pigmentation pathway. In cells that express the A1 gene, dihydrokempferol is converted to 2-8 alkylleucopelargonidin, which may be further metabolized to pelargonidin pigment by endogenous plant enzymes. Other **anthocyanin** or **flavonoid** type pigments may also be of interest for modification of cotton cell fibers, plant flowers or other plant tissues. For. . .

DETD . . . green colored fibers has been identified. The existence of these colored cotton lines suggests that the precursors required for the **anthocyanin** pigment pathways are present in cotton fibers cells, thus allowing further color phenotype modifications.

DETD . . . any of a variety of ways, depending upon the nature of the product, and include immune assay, enzyme assay or **visual** inspection, for example to detect pigment formation in the appropriate plant part or cells. Once transgenic plants have been obtained,. . .

L13 ANSWER 11 OF 21 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 2001:407320 BIOSIS

DOCUMENT NUMBER: PREV200100407320

TITLE: Anthocyanins, phenolics and oxygen radical absorbing capacity of berry germplasm.

AUTHOR(S): Moyer, Richard A. (1); Hummer, Kim E.; Wrolstad, Ronald E.; Finn, Chad E.

CORPORATE SOURCE: (1) King College, 1350 King College Road, Bristol, TN, 37620 USA

SOURCE: Hortscience, (June, 2001) Vol. 36, No. 3, pp. 489. print.  
Meeting Info.: 98th Annual International Conference of the American Society for Horticultural Science Sacramento, California, USA July 21-25, 2001  
ISSN: 0018-5345.

DOCUMENT TYPE: Conference

LANGUAGE: English

SUMMARY LANGUAGE: English

AB High antioxidant content of berry crops may provide human health benefits such as reduced coronary heart disease, improved **visual** acuity, or anti-viral and anti-cancer activity. We were greatly interested to determine the range of total **anthocyanin** content (ACY), total phenolic content (TPH) and oxygen radical absorbing capacity (ORAC) in diverse species and cultivar gene germplasm of. . . stored on ice, and frozen at -10oC in the laboratory that same afternoon. ACY was determined by the pH differential method. **Anthocyanin** pigments were separated by high pressure liquid chromatography (HPLC). TPH was determined by the Folin-Ciocalteu method. ACY for Ribes nigrum. . .

ORGN . . .  
Dicotyledones, Angiospermae, Spermatophyta, Plantae; Rosaceae:  
Dicotyledones, Angiospermae, Spermatophyta, Plantae; Saxifragaceae:  
Dicotyledones, Angiospermae, Spermatophyta, Plantae

ORGN Organism Name

Ribes nigrum [black **currant**] (Saxifragaceae): small fruit

crop; Rubus niveus [black raspberry] (Rosaceae): small fruit crop;  
Rubus occidentalis [black raspberry] (Rosaceae): small fruit crop;.

L13 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:626390 CAPLUS

DOCUMENT NUMBER: 136:133734

TITLE: Visual perception improving function of  
cassis anthocyanins. Part 1. Properties and  
visual perception function of anthocyanins

AUTHOR(S): Hirayama, Masao; Matsumoto, Hitoshi

CORPORATE SOURCE: Meiji Seika Co. Ltd., Japan

SOURCE: Shokuhin Kogyo (2001), 44(14), 58-69

CODEN: SKGYAW; ISSN: 0559-8990

PUBLISHER: Korin

DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese

TI Visual perception improving function of cassis anthocyanins.  
Part 1. Properties and visual perception function of  
anthocyanins

AB A review on the effect of anthocyanins in health food on the improvement  
of visual perception.

ST review cassis anthocyanin health food eye perception

IT Currant (Ribes nigrum)  
(anthocyanins of health food for improvement of eye  
perception)

IT Health food  
(cassis anthocyanins of health food for improvement of eye  
perception)

IT Anthocyanins  
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological  
study); USES (Uses)  
(cassis anthocyanins of health food for improvement of eye  
perception)

IT Eye  
(cassis anthocyanins of health food for improvement of perception of)

L13 ANSWER 13 OF 21 USPATFULL

ACCESSION NUMBER: 2000:138502 USPATFULL

TITLE: Cytochrome P-450 monooxygenases

INVENTOR(S): Koch, Birgit Maria, Vanl.o slashed.se, Denmark

Sibbesen, Ole, Roskilde, Denmark

Halkier, Barbara Ann, Copenhagen V, Denmark

M.o slashed.ller, Birger Lindberg, Br.o slashed.nsh.o

slashed.j, Denmark

PATENT ASSIGNEE(S): Novartis Finance Corporation, New York, NY, United  
States (U.S. corporation)

Royal Veterinary Agricultural University, Copenhagen,  
Denmark (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6133417		20001017
APPLICATION INFO.:	US 1999-256797		19990224 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 656177		

	NUMBER	DATE
PRIORITY INFORMATION:	EP 1993-810860	19931208
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Riley, Jezia	
LEGAL REPRESENTATIVE:	Meigs, J. Timothy	
NUMBER OF CLAIMS:	37	

EXEMPLARY CLAIM: 1  
LINE COUNT: 2064

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . all approximately 250 known published sequences for cytochrome P-450 enzymes, cytochrome P-450.sub.TYR shows the highest sequence similarity to the petunia 3'5'-**flavonoid** hydroxylase (30.8%) and 28% sequence similiarity to CYP1A2 from rabbit. The group of cytochrome P-450.sub.I monooxygenases functionally characterized by catalyzing. . .

DETD . . . Chickpea

Dolichos lablab Hyacinth bean  
Glycine gracilis Manchurian Soya  
G. max Soyabean  
G. ussuriensis Wild soya  
Lathyrus sativus Grass pea  
**Lens** culinaris Lentil  
Mucuna pruriens Cowitch, Florida velvet bean  
Phaseolus acutifolius Tepary bean  
P. aureus Mung, green gram  
P. lunatus Lima. . . cherry  
Psidium guajava Guava  
Punica granatum Pomegranate  
Pyrus communis Pear  
P. ussuriensis Chinese pear  
Ribes grossularia Gooseberry  
R. nigrum Black **currant**  
R. rubrum Red and white **currant**  
Rubus idaeus European raspberry  
R. strigosus American raspberry  
Tamarindus indica Tamarind  
Vaccinium angustifolium Sugarberry  
V. ashei Rabbiteye blueberry  
V. corymbosum. . .

L13 ANSWER 14 OF 21 USPATFULL

ACCESSION NUMBER: 2000:87741 USPATFULL

TITLE: Food supplements

INVENTOR(S): Howard, Alan Norman, Cambridge, United Kingdom  
Nigdikar, Shailja Vijay, Suffolk, United Kingdom  
Rajput-Williams, Jays shri, Cambridge, United Kingdom  
Williams, Norman Ross, Cambridgeshire, United Kingdom  
PATENT ASSIGNEE(S): The Howard Foundation, Cambridge, United Kingdom  
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6086910		20000711
APPLICATION INFO.:	US 1997-978158		19971125 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1997-934055, filed on 19 Sep 1997		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	MacMillan, Keith D.		
ASSISTANT EXAMINER:	Faulkner, D.		
LEGAL REPRESENTATIVE:	Pillsbury Madison & Sutro		
NUMBER OF CLAIMS:	25		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 2 Drawing Page(s)		
LINE COUNT:	1561		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM There is a considerable literature on the alleged beneficial effects of **rod** wine in relation to prevention of coronary heart disease (CHD). Epidemiological data suggest the protection afforded by wine is

superior. . . .

SUMM . . . in FIG. 5. They are sometimes called anthocyanidins. Typical examples are: cyanidin (hydroxylated at positions 3, 5, 7, 3', 4'), **delphinidin** (hydroxylated at positions 3, 5, 7, 3', 4', 5') and pelargonidin (hydroxylated at positions 3, 5, 7, 3'). The hydroxyl. . .

SUMM . . . into the fermenting wine. Hence, French Paradox capsules have actually rather low polyphenol content. (Other publicly available compositions include an **anthocyanin**-containing powder (obtainable from Sefcal) made from a grape skin extract, and which is used as a food colourant, and a. . . .

DETD There was no effect with white wine, **anthocyanin** powder (Sefcal.TM., an extract from grape skins used as a food colorant) red wine pomace, French Paradox.TM. capsules (Arkopharma) or. . . .

DETD 4) Sefcal.TM. **anthocyanin**, as described in example 2

DETD A) A **blackcurrant** flavoured drink (330 ml) containing 1 g total red wine polyphenols and mixed with a commercially available powder (sugar, citric. . . .

CLM What is claimed is:

1. A flavonol and **anthocyanin** containing dry composition suitable for oral administration comprising at least 1% w/w flavonol, wherein at least 1% w/w flavonol is. . . .
- . . . of inhibiting oxidation of plasma LDL in a human subject, the method comprising administering at least 1% of flavonol and **anthocyanin** wherein at least 1% w/w flavonol is soluble in water to the subject.
- . . . A method of stimulating TGF-.beta. production in a human subject, the method comprising administering at least 1% of flavonol and **anthocyanin** wherein at least 1% w/w flavonol is soluble in water to the subject.
- . . . inhibiting platelet aggregation and/or stimulating fibrinolysis in a human subject, the method comprising administering at least 1% of flavonol and **anthocyanin** wherein at least 1% w/w flavonol is soluble in water to the subject.
- . . . human subject for inhibiting oxidation of plasma LDL in the subject comprising combining administering at least 1% of flavonol and **anthocyanin** wherein at least 1% w/w flavonol is soluble in water with a suitable carrier.
- . . . consumption by a human subject for stimulating TGF-.beta. production in said human subject administering at least 1% of flavonol and **anthocyanin** wherein at least 1% w/w flavonol is soluble in water, with a suitable carrier.
- . . . by a human subject for inhibiting platelet aggregation and/or stimulating fibrinolysis in said subject at least 1% of flavonol and **anthocyanin** wherein at least 1% w/w flavonol is soluble in water, with a suitable carrier.
- . . . of fibrinolysis; and stimulation of TGF-.beta. production; the method comprising preparing a composition administering at least 1% of flavonol and **anthocyanin** wherein at least 1% w/w flavonol is soluble in water, to the subject in unitary doses.
- . . . A composition suitable for oral administration for inhibiting oxidation of plasma LDL comprising administering at least 1% of flavonol and **anthocyanin** wherein at least 1% w/w flavonol is soluble in water, to the subject and a suitable carrier.
- . . . oral administration for inhibiting oxidation of plasma LDL in a human subject comprising administering at least 1% of flavonol and **anthocyanin** wherein at least 1% w/w flavonol is soluble in water



and dissolved in a physiologically acceptable liquid dissolved in a.

suitable for oral administration for stimulating TGF- $\beta$  production in a human subject comprising administering at least 1% of flavonol and **anthocyanin** wherein at least 1% w/w flavonol is soluble in water and is dissolved in a physiologically acceptable liquid dissolved in.

administration for inhibiting platelet aggregation and/or stimulating fibrinolysis in a human subject comprising administering at least 1% of flavonol and **anthocyanin** wherein at least 1% w/w flavonol is soluble in water and is dissolved in a physiologically acceptable liquid dissolved in.

L13 ANSWER 15 OF 21 USPATFULL

ACCESSION NUMBER: 1999:33763 USPATFULL

TITLE: Cytochrome P-450 monooxygenases

INVENTOR(S): Koch, Birgit Maria, Vanl.o slashed.se, Denmark

Sibbesen, Ole, Roskilde, Denmark

Halkier, Barbara Ann, Copenhagen V, Denmark

Lindberg M.o slashed.ller, Birger, Br.o slashed.nsh.o

slashed.j, Denmark

PATENT ASSIGNEE(S): Novartis Finance Corporation, New York, NY, United States (U.S. corporation)

Royal Veterinary Agricultural University, Copenhagen, Denmark (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5882851		19990316
	WO 9516041		19950615
APPLICATION INFO.:	US 1996-656177		19960808 (8)
	WO 1994-EP3938		19941128
			19960808 PCT 371 date
			19960808 PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	EP 1993-810860	19931208
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Marschel, Ardin H.	
ASSISTANT EXAMINER:	Riley, Jezia	
LEGAL REPRESENTATIVE:	Meigs, J. Timothy, Pace, Gary M.	
NUMBER OF CLAIMS:	42	
EXEMPLARY CLAIM:	1	
LINE COUNT:	2080	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . all approximately 250 known published sequences for cytochrome P-450 enzymes, cytochrome P-450.sub.TYR shows the highest sequence similarity to the petunia 3'5'-**flavonoid** hydroxylase (30,8%) and 28% sequence similiarity to CYP1A2 from rabbit. The group of cytochrome P-450.sub.I monooxygenases functionally characterized by catalyzing. . .

DETD . . . Groundnut, peanut

Cajanus indicus Pigeon pea

Cicer arietinum Chickpea

Dolichos lablab Hyacinth bean

Glycine gracilis

Manchurian Soya

G. max Soyabean

G. ussuriensis Wild soya

Lathyrus sativus

Grass pea

Lens culinaris Lentil

Mucuna pruriens Cowitch, Florida velvet bean  
 Phaseolus acutifolius  
     Tepary bean  
 P. aureus Mung, green gram  
 P. lunatus Lima bean, Sieva  
 P. coccineus Scarlet. . . salicina Japanese peach  
 P. serotina Wild black cherry  
 Psidium guajava Guava  
 Punica granatum Pomegranate  
 Pyrus communis Pear  
 P. ussuriensis Chinese pear  
 Ribes grossularia  
     Gooseberry  
 R. nigrum Black **currant**  
 R. rubrum Red and white **currant**  
 Rubus idaeus European raspberry  
 R. strigosus American raspberry  
 Tamarindus indica  
     Tamarind  
 Vaccinium angustifolium  
     Sugarberry  
 V. ashei Rabbiteye blueberry  
 V. corymbosum Highbush blueberry  
 V. myrtilloides Canada blueberry  
 V. oxycoccos. . .

L13 ANSWER 16 OF 21 USPATFULL

ACCESSION NUMBER: 1999:1289 USPATFULL  
 TITLE: Drink compositions utilizing gelatinised starch and  
     method of making  
 INVENTOR(S): Mills, Peter Tempele John, Capetown, South Africa  
     Gristwood, Clive, Norwich, England  
 PATENT ASSIGNEE(S): Robinsons Soft Drinks Limited, Chelmsford, England  
     (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5855948		19990105
APPLICATION INFO.:	US 1996-717731		19960924 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Pratt, Helen		
LEGAL REPRESENTATIVE:	Wolf, Greenfield & Sacks, P.C.		
NUMBER OF CLAIMS:	45		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	3 Drawing Figure(s); 3 Drawing Page(s)		
LINE COUNT:	826		

SUMM . . . the present invention can contain from 8 to 18% v/v of a juice,  
     such as that extracted from orange, black **currant**, peach,  
     raspberry, strawberry, apple, and mixtures thereof.

DETD . . . juice is preferably obtained by the extraction and  
     concentration by evaporation of juices extracted from fresh fruit, such  
     as orange, **blackcurrant**, peach, raspberry, strawberry, apple,  
     pear, grapefruit, passionfruit, pineapple, guava, or mango, including a  
     mixture of two or more thereof. For. . .

DETD . . . potassium sorbate, sodium metabisulphite or sodium benzoate, or  
     a mixture of two or more thereof. The colourant may be carotene,  
     **anthocyanin**, or any other natural or artificial colouring, or a  
     mixture thereof. Examples are grapeskin extract, beta-carotene, carmine  
     cochineal, tartrazine, sunset yellow FCF and brilliant blue FCF. The  
     fruit comminute may be concentrated orange, **blackcurrant**,  
     peach, raspberry, strawberry, apple pear, grapefruit, passionfruit,  
     guava, or mango fruit comminute, or a mixture of two or more thereof.

DETD . . . drink compositions possess. Indeed, the drink compositions

according to the present invention possess a pleasant lingering aftertaste and an attractive **visual** appearance. These last two properties will be discussed further later.

DETD . . . it does not contain, for example, proteins and insoluble fibres. These impurities could lead to unstable products with sediment e.g. protein-**anthocyanin** sediment. Impure sources of starch such as potato pulp could thus cause problems.

DETD **Blackcurrant** Flavoured Concentrate Composition

DETD

(a)	starch	0.90%	w/v
	(derived from barley)		
(b1)	aspartame	0.08%	w/v
(b2)	sodium saccharin	0.05%	w/v
(c)	concentrated <b>blackcurrant</b>	1.50%	v/v
	juice (6X)		
(d)	<b>blackcurrant</b>	0.10%	v/v
	flavouring		
(e)	citric acid	1.00%	w/v
(f)	trisodium citrate	0.55%	w/v
(g)	sodium metabisulphite	0.02%	w/v
(h)	potassium sorbate	0.10%	w/v
(i)	grapeskin.		

DETD **Blackcurrant** Flavoured Concentrate Compositions Where the Starch Level is Varied

DETD

(a)	starch	0.80, 1.20, 1.60 & 2.00%	w/v
	(derived from barley)		
(b1)	aspartame	0.08%	w/v
(b2)	sodium saccharin	0.05%	w/v
(c)	concentrated <b>blackcurrant</b>	1.50%	v/v
	juice (6X)		
(d)	<b>blackcurrant</b>	0.10%	v/v
	flavouring		
(e)	citric acid	1.00%	w/v
(f)	trisodium citrate	0.55%	w/v
(g)	sodium metabisulphite	0.02%	w/v
(h)	potassium sorbate	0.10%	w/v
(i)	grapeskin.		

DETD

(a)	starch	1.60%	w/v
	(derived from barley)		
(b2)	sodium saccharin	0.01%	w/v
(c)	concentrated <b>blackcurrant</b>	0.85%	v/v
	juice (6X)		
(d)	<b>blackcurrant</b> flavouring	0.025%	v/v
(e)	citric acid	0.20%	w/v
(f)	trisodium citrate	0.11%	w/v
(g)	sodium metabisulphite	0.004%	w/v

(h) potassium sorbate 0.02% w/v  
 (i) grapeskin. . .  
 DETD **Blackcurrant** Flavoured Concentrate Composition with a Low  
 Ratio of Starch to Artificial Sweetener (3:1)

DETD

(a)	starch	0.60%	w/v
	(derived from barley)		
(b1)	aspartame	0.20%	w/v
(c)	concentrated <b>blackcurrant</b>	1.67%	v/v
	juice (6X)		
(d)	<b>blackcurrant</b> flavouring	0.10%	V/V
(e)	citric acid	1.00%	w/v
(f)	trisodium citrate	0.55%	w/v
(g)	sodium metabisulphite	0.20%	w/v
(h)	potassium sorbate	0.10%	w/v
(i)	grapeskin. . .		

DETD **Blackcurrant** Flavoured Concentrate Composition Comprising  
 Modified Starch

DETD

(a)	modified starch	0.90%	w/v
	(Purity w from National Starch)		
(b1)	aspartame	0.08%	w/v
(b2)	sodium saccharin	0.05%	w/v
(c)	concentrated <b>blackcurrant</b>	1.50%	v/v
	juice (6X)		
(d)	<b>blackcurrant</b> flavouring	0.10%	V/V
(e)	citric acid	1.00%	w/v
(f)	trisodium citrate	0.55%	w/v
(g)	sodium metabisulphite	0.02%	w/v
(h)	potassium sorbate	0.10%	w/v
(i)	grapeskin. . .		

DETD We have also been surprised to find that the use of gelatinised starch  
 can improve the **visual** appearance of drink compositions,  
 especially coloured drink compositions. It can make them brighter in  
 colour, and make them more opaque.

DETD According to another aspect the invention comprises the use of  
 gelatinised starch in a drink composition to improve its **visual**  
 appearance, preferably to brighten and/or deepen its colour.

DETD Thus in the embodiments that we have produced the gelatinised starch  
 improved the **visual** appearance of a drink not only by keeping  
 cellular and other sedimentary material (eg pectates, ground peel) in  
 suspension (instead. . .

CLM What is claimed is:  
 10. A drink composition as claimed in claim 8, which includes a juice  
 extracted from fresh orange, **blackcurrant**, peach, raspberry,  
 strawberry or apple fruits, or a mixture of two or more thereof.

28. A drink composition as claimed in claim 27, wherein the colourant is  
 carotene or **anthocyanin**, or a mixture thereof.

and/or preventing ischemia and/or pathologies assocd.  
with ischemia or with energy deficiency

INVENTOR(S): Remacle, Jose; Michiels, Carine  
PATENT ASSIGNEE(S): Belg.  
SOURCE: PCT Int. Appl., 41 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851291	A1	19981119	WO 1998-BE67	19980512
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, DE, DE, EE, GE, GW, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
BE 1011151	A3	19990504	BE 1997-415	19970513
AU 9873272	A1	19981208	AU 1998-73272	19980512
EP 981339	A1	20000301	EP 1998-920410	19980512
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
JP 2001526658	T2	20011218	JP 1998-548622	19980512
NO 9905500	A	19991110	NO 1999-5500	19991110
US 2002165270	A1	20021107	US 2002-131921	20020423
PRIORITY APPLN. INFO.:			BE 1997-415	A 19970513
			WO 1998-BE67	W 19980512
			US 2000-423967	B1 20000320

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB The invention concerns the use of a pharmaceutical compn. comprising a suitable pharmaceutical carrier and an active compd. selected among the group consisting of bioflavonoids, rutin-garlic, troxerutin, coumarin, diosmin, o-(-hydroxyethyl) rutins, sweet clover and rutin exts., tribenoside, methylchalcone hesperidin, Indian chestnut ext., naphtazone, esculoside, aescin, procyanidine oligomers, butcher's broom and methylchalcone hesperidine exts., ruscoides, common holly and black **currant** exts., bilberry **anthocyanin** exts., the active principles of these compds. and/or a mixt. of them, acting on a patient's mitochondrial membrane protein complexes, to prep. a medicine for treating and/or preventing ischemia and/or pathologies assocd. with ischemia or with energy deficiency.

ST antiischemic energy deficiency pharmaceutical; bioflavonoid rutin garlic troxerutin coumarin diosmin antiischemic energy deficiency; hydroxyethyl rutin sweet clover tribenoside naphtazone antiischemic energy deficiency; methylchalcone hesperidin Indian chestnut esculoside aescin antiischemic energy deficiency; procyanidine oligomer butcher broom ruscoides holly antiischemic energy deficiency; black **currant** bilberry **anthocyanin** antiischemic energy deficiency; mitochondria membrane protein complex antiischemic energy deficiency

IT Bilberry  
Currant (Ribes nigrum)  
Ilex  
Ruscus  
Sweet clover (Melilotus)

(ext.; pharmaceutical compn. for treating and/or preventing ischemia and/or pathologies assocd. with ischemia or with energy deficiency)

IT Eye, disease  
(retina, ischemia; pharmaceutical compn. for treating and/or preventing ischemia and/or pathologies assocd. with ischemia or with energy deficiency)

## L13 ANSWER 18 OF 21 USPATFULL

ACCESSION NUMBER: 96:55939 USPATFULL  
TITLE: Use of ovary-tissue transcriptional factors  
INVENTOR(S): Martineau, Belinda M., Davis, CA, United States  
Stalker, David M., Davis, CA, United States  
Reilley, Ann A., Fort Collins, CO, United States  
PATENT ASSIGNEE(S): Calgene, Inc., Sacramento, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5530185		19960625
APPLICATION INFO.:	US 1992-998158		19921229 (7)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1990-554195, filed on 17 Jul 1990, now patented, Pat. No. US 5175095 which is a continuation-in-part of Ser. No. US 1989-382518, filed on 19 Jul 1989, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Fox, David T.		
ASSISTANT EXAMINER:	Campell, Bruce		
LEGAL REPRESENTATIVE:	Rae-Venter, Barbara, Bradburne, James A.		
NUMBER OF CLAIMS:	18		
EXEMPLARY CLAIM:	1,10		
NUMBER OF DRAWINGS:	14 Drawing Figure(s); 11 Drawing Page(s)		
LINE COUNT:	1353		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . result in useful modifications to the edible portions of many fruits, including true berries such as tomato, grape, blueberry, cranberry, **currant**, and eggplant; stone fruits (drupes), such as cherry, plum, apricot, peach, nectarine and avocado; and compound fruits (druplets), such as. . .

DETD . . . colored pigments in plant tissues, such as the Maize A1 gene which encodes a dihydroflavonol reductase, an enzyme of the **anthocyanin** pigmentation pathway. In cells that express the A1 gene, dihydrokempferol is converted to 2-8 alkylleucopelargonidin, which may be further metabolized to pelargonidin pigment by endogenous plant enzymes. Other **anthocyanin** or **flavonoid** type pigments may also be of interest for modification of cotton cell fibers. For a review of plant flower color. . . green colored fibers has been identified. The existence of these colored cotton lines suggests that the precursors required for the **anthocyanin** pigment pathways are present in cotton fibers cells, thus allowing further color phenotype modifications.

DETD . . . any of a variety of ways, depending upon the nature of the product, and include immune assay, enzyme assay or **visual** inspection, for example to detect pigment formation in the appropriate plant part or cells. Once transgenic plants have been obtained,. . .

## L13 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1988:4743 CAPLUS  
DOCUMENT NUMBER: 108:4743  
TITLE: Spectrophotometric analysis of fruits and fruit containing anthocyanins  
AUTHOR(S): Kozma-Kovacs, E.; Sarkany, P.  
CORPORATE SOURCE: Cent. Food Res. Inst., Budapest, Hung.  
SOURCE: Bulletin de Liaison - Groupe Polyphenols (1986), 13, 473-5

CODEN: BLPLAS; ISSN: 0242-8466

DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The effects of citric acid, sugar, tartaric acid, and syrups on the **visual** observation of color development in fruits contg.

anthocyanins were detd. and compared with color development monitored spectrometrically. Black **currant** berries were harvested, stored at -25.degree., and warmed to obtain fruit nectars and water-free fruit squashes. Nectars were made from juice mech. extd. with or without water or produced by enzyme treatment. Squashes were prepd. from the juices by water removal. Color development was correlated to **anthocyanin** content and was influenced by acid pH, phenol components, the proportion of aldose and ketose sugars, and the presence of ascorbic acid and polyphenolase. Samples contg. tartaric acid and syrups were of poorer color quality. However, the tartaric acid contents decreased less in berry samples stored for 3 mo than did citric acid. Juices produced by enzyme treatment had more color and greater juice yields.

ST black **currant** juice **anthocyanin** detn; spectrometry  
black **currant** juice **anthocyanin**

IT Syrups  
Carbohydrates and Sugars, uses and miscellaneous  
RL: USES (Uses)  
(black **currant** juice anthocyanins spectrometric detn.  
response to)

IT Anthocyanins  
RL: ANT (Analyte); ANST (Analytical study)  
(detn. of, of black **currant** juice, spectrometric, factors  
affecting)

IT Beverages  
(squashes, black **currant**, anthocyanins detn. in,  
spectrometric, factors affecting)

IT **Currant** (Ribes)  
(R. nigrum, juice, anthocyanins detn. in, spectrometric, factors  
affecting)

IT 77-92-9, Citric acid, uses and miscellaneous 87-69-4, Tartaric acid,  
uses and miscellaneous  
RL: USES (Uses)  
(black **currant** juice anthocyanins spectrometric detn.  
response to)

L13 ANSWER 20 OF 21 PASCAL COPYRIGHT 2003 INIST-CNRS. ALL RIGHTS RESERVED.  
ACCESSION NUMBER: 1984-0071807 PASCAL  
TITLE (IN ENGLISH): **Visual** color deterioration in  
**blackcurrant** syrup predicted by different  
instrumental variables  
TITLE (IN FRENCH): Determination, par differentes techniques  
instrumentales, de la degradation de la couleur des  
sirops de cassis  
AUTHOR: SKREDE G.; NAES T.; MARTENS M.  
CORPORATE SOURCE: Norwegian food res. inst., Aas, Norway  
SOURCE: Journal of Food Science, (1983), 48(6), 1745-1749, 16  
refs.  
ISSN: 0022-1147  
DOCUMENT TYPE: Journal  
BIBLIOGRAPHIC LEVEL: Analytic  
COUNTRY: United States  
LANGUAGE: English  
NOTE: 8 fig.  
AVAILABILITY: CNRS-713  
TIEN **Visual** color deterioration in **blackcurrant** syrup  
predicted by different instrumental variables  
TIFR Determination, par differentes techniques instrumentales, de la  
degradation de la couleur des sirops. . .  
CT Black **currant**; Warehousing; Decolorizing; Composition;  
**Anthocyanin**; Shelf life

L13 ANSWER 21 OF 21 USPATFULL  
ACCESSION NUMBER: 80:52559 USPATFULL  
TITLE: Method of treatment of atheroma

INVENTOR(S): Majoie, Bernard, Dijon, France  
 PATENT ASSIGNEE(S): Societe de Recherches Industrielles (SORI), Paris,  
 France (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4229439		19801021
APPLICATION INFO.:	US 1977-853422		19771121 (5)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Brown, Johnnie R.		
LEGAL REPRESENTATIVE:	Bacon & Thomas		
NUMBER OF CLAIMS:	6		
EXEMPLARY CLAIM:	1		
LINE COUNT:	245		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . (ii) improving the resistance and the permeability of capillaries (see French BSM No. 6760M) and therefore being useful for improving **visual** acuity by night (see British Pat. No. 1,007,751).

DETD (ii) the **delphinidin** compounds when R' is OH, namely

DETD the **delphinidin** salts (R=H) and in particular **delphinidin** chloride (V) which is 2-(3,4,5-trihydroxyphenyl)-3,5,7-trihydroxy-1-benzopyrylium chloride,

DETD the **delphinidin**-3-glucoside salts (R=glucosyl) in particular **delphinidin**-3-glucoside chloride (VI)

DETD the **delphinidin**-3-rhamnoglucoside salts (R=rhamnoglucosyl) in particular **delphinidin**-3-rhamnoglucoside chloride (VII); and

DETD . . . fruit containing them. In particular, the mixture of III, IV, VI and VII can be obtained in large quantity from **blackcurrant**, and IX can be obtained pure from certain flowers wherein it is almost the only anthocyanidin compound.

DETD . . . and as the only anthocyanidin in the plant (which is the case of petunidin derivatives in flowers, and also of **delphinidin** derivatives in aubergines for example), the extraction followed by a mere purification leads to the desired products with a degree. . .

DETD . . . (which is the case with compounds III, IV, VI and VII in blackcurrants), first the anthocyanic mixture is extracted (from **blackcurrant** concentrated juices or marcs for example) according to a method known per se. Then, in an anion exchanging column or. . .

IT 528-53-0 528-58-5 1429-30-7 **6906-38-3** 6988-81-4  
 7084-24-4 29907-19-5 38533-30-1  
 (pharmaceuticals contg., for atheroma and angiopathy treatment)



FILE 'REGISTRY' ENTERED AT 14:16:32 ON 03 APR 2003

L1 0 S DELPHINIDIN RUTINOSIDE  
L2 0 S DELPHINIDIN 2 O RUTINOSIDE  
L3 47 S DELPHINIDIN 3  
L4 11 S DELPHINIDIN 3 O

FILE 'REGISTRY' ENTERED AT 14:20:35 ON 03 APR 2003

L5 1 S 15674-58-5/RN  
SET NOTICE 1 DISPLAY  
SET NOTICE LOGIN DISPLAY

FILE 'ADISCTI, ADISINSIGHT, ADISNEWS, BIOSIS, BIOTECHNO, CANCERLIT, CAPLUS, CEN, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, EMBAL, EMBASE, ESBIODBASE, IFIPAT, IPA, JICST-EPLUS, KOSMET, LIFESCI, MEDICONF, MEDLINE, NAPRALERT, NLDB, NUTRACEUT, ...' ENTERED AT 14:21:41 ON 03 APR 2003

L6 104809 S L4 OR DELPHINIDIN OR ANTHOCYANIN OR FLAVONOID  
L7 4186450 S EYE? OR VISION OR VISUAL OR MYOPIA OR MYOPIC OR ASTHENOPI? OR  
L8 1935 S L6 AND L7  
L9 6690 S CURRANT  
L10 2549 S BLACKCURRANT  
L11 8784 S L9 OR L10  
L12 21 S L11 AND L8  
L13 21 DUP REM L12 (0 DUPLICATES REMOVED)